WHAT IS CLAIMED IS:

1. A coordinate input apparatus in which light from a designating tool is applied to a prescribed position on a coordinate input screen to produce a beam spot and

5   coordinates corresponding to the beam spot are generated, the apparatus comprising:

a plurality of sensing means provided in the vicinity of at least one coordinate axis for sensing the beam spot;

10   correction means for correcting results of sensing from each of said plurality of sensing means;

concatenation means for concatenating data that has been corrected by said correction means; and

output means for outputting coordinate values

15   corresponding to the beam spot based upon the data concatenated by said concatenation means;

wherein light-receptive areas of said plurality of sensing means have overlapping portions.

2. The apparatus according to claim 1, wherein said

20   correction means corrects the results of sensing from each of said plurality of sensing means based upon reference coordinate values that have been stored in advance.

3. The apparatus according to claim 1, wherein each of

25   said plurality of sensing means is a linear sensor comprising a plurality of optoelectronic transducers

- 46 -

arrayed on a straight line.

4. The apparatus according to claim 1, wherein said correction means corrects the results of sensing from each of said plurality of sensing means based upon inclination of second sensing means relative to first sensing means among said plurality of sensing means.

5. The apparatus according to claim 1, wherein said correction means corrects the results of sensing from each of said plurality of sensing means based upon a magnification, which is for calculating coordinates, set for each of the plurality of sensing means.

6. A coordinate input method in which light from a designating tool is applied to a prescribed position on a coordinate input screen to produce a beam spot and coordinates corresponding to the beam spot are generated, the apparatus comprising:

a correction step of correcting results of sensing from each of a plurality of sensing units provided in the vicinity of at least one coordinate axis for sensing the beam spot;

a concatenation step of concatenating data that has been corrected at said correction step; and

an output step of outputting coordinate values corresponding to the beam spot based upon the data concatenated at said concatenation step;

wherein light-receptive areas of the plurality of

sensing units have overlapping portions.

7. The method according to claim 6, wherein said correction step corrects the results of sensing from each of said plurality of sensing units based upon
5 reference coordinate values that have been stored in advance.

8. The method according to claim 6, wherein each of said plurality of sensing units is a linear sensor comprising a plurality of optoelectronic transducers
10 arrayed on a straight line.

9. The method according to claim 6, wherein said correction step corrects the results of sensing from each of said plurality of sensing units based upon inclination of a second sensing unit relative to a first
15 sensing unit among said plurality of sensing units.

10. The method according to claim 6, wherein said correction step corrects the results of sensing from each of said plurality of sensing units based upon a magnification, which is for calculating coordinates, set
20 for each of the plurality of sensing units.

11. A computer-readable memory storing coordinate-input program code, in which light from a designating tool is applied to a prescribed position on a coordinate input screen to produce a beam spot and coordinates
25 corresponding to the beam spot are generated, said program code comprising:

program code of a correction step of correcting results of sensing from each of a plurality of sensing units provided in the vicinity of at least one coordinate axis for sensing the beam spot;

5   program code of a concatenation step of concatenating data that has been corrected at the correction step; and

program code of an output step of outputting coordinate values corresponding to the beam spot based

10   upon the data concatenated at the concatenation step;

wherein light-receptive areas of the plurality of sensing units have overlapping portions.

- 49 -